

**IN THE SPECIFICATION:**

Kindly amend the specification, without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows:

Please amend the title to read as follows:

IMMUNIZATION OF ANIMALS BY TOPICAL APPLICATION OF AN  
~~SALMONELLA-BASED~~ ESCHERICHIA-BASED VECTOR

Kindly amend the paragraph at page 7, lines 12 to 21, to read as follows:

Non-invasive vaccination onto the skin (NIVS) can improve vaccination schemes because skin is an immunocompetent tissue and unlike delivery of DNA-based vaccines using a gene gun or a needle, this non-invasive procedure requires no specially trained personnel or equipment. Skin-targeted non-invasive gene delivery can achieve localized transgene expression in the skin and the elicitation of immune responses (Tang et al., 1997) and the mechanism for these responses is different than that from topical application of protein-based vaccines in conjunction with cholera toxin (Glenn et al., 1998). These results indicate that vector-based NIVS is a novel and efficient method for the delivery of vaccines. The simple, effective, economical and painless immunization protocol of the present invention should make vaccination less dependent upon medical resources and, therefore, increase the annual utilization rate of vaccinations.